

### IN THE CLAIMS

Please amend the claims as follows:

Claims 1-11 (Canceled).

Claim 12 (New): A method for sorting particles, comprising:  
marking the particles, to modify their optical index;  
placing the particles on at least one waveguide of a support; and  
injecting light radiation through the waveguide, causing displacement of particles on the waveguide and separation of the particles.

Claim 13 (New): A method according to claim 12, wherein the radiation inserted in the waveguide is polarized in a transverse magnetic mode.

Claim 14 (New): A method according to claim 12, wherein the particles are immersed in a liquid medium.

Claim 15 (New): A method according to claim 12, wherein the particles form clusters on the waveguide.

Claim 16 (New): A method according to claim 12, wherein the sorted particles have identical compositions but different sizes.

Claim 17 (New): A method according to claim 12, wherein the sorted particles have a same or approximately a same size but different compositions.

Claim 18 (New): A method according to claim 12, wherein the particles are cells or macromolecules or microballs.

Claim 19 (New): A method according to claim 12, wherein the radiation is in a spectral range between the near ultraviolet and infrared.

Claim 20 (New): A method according to claim 12, wherein the particles are microballs, and microball marked cells, and the radiation is located in the infrared range.

Claim 21 (New): A method according to claim 12, wherein some particles are metallic or marked by metallic particles.

Claim 22 (New): A method according to claim 21, wherein some particles are gold particles or are marked by gold particles.